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(54) **MOBILE WIRELESS COMMUNICATIONS SYSTEM AND METHOD WITH CORRECTIVE ACTION RESPONSIVE TO COMMUNICATIONS FAULT DETECTION**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

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CPC *H04W 24/02* (2013.01); *H04W 4/02* (2013.01); *H04W 8/02* (2013.01)

(58) **Field of Classification Search**
CPC H04W 24/02; H04W 8/02; H04W 4/02
See application file for complete search history.

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(57) **ABSTRACT**

A mobile device, wireless network and their method of operation provide fault handling in response to detection of a communications fault between a connected mobile device and the communications network. The communications network tracks location of mobile devices and stores performance data of connections between the mobile devices and the network. The performance data is referenced to expected performance data to determine whether a fault exists and a corrective action is suggested when the fault exists.

22 Claims, 90 Drawing Sheets

TYPICAL SECOND GENERATION WIRELESS NETWORK ARCHITECTURE WITH EMBODIEMENTS